

Title (en)

PATTERNING OF HIGH REFRACTIVE INDEX GLASSES BY PLASMA ETCHING

Title (de)

STRUKTURIERUNG VON GLÄSERN MIT HOHEM BRECHUNGSINDEX DURCH PLASMAÄTZEN

Title (fr)

FORMATION DE MOTIFS SUR VERRES À INDICE DE RÉFRACTION ÉLEVÉ PAR GRAVURE PAR PLASMA

Publication

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Application

EP 22188447 A 20180104

Priority

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Abstract (en)

Plasma etching processes for forming patterns in high refractive index glass substrates, such as for use as waveguides, are provided herein. The substrates may be formed of glass having a refractive index of greater than or equal to about 1.65 and having less than about 50 wt% SiO₂. The plasma etching processes may include both chemical and physical etching components. In some embodiments, the plasma etching processes can include forming a patterned mask layer on at least a portion of the high refractive index glass substrate and exposing the mask layer and high refractive index glass substrate to a plasma to remove high refractive index glass from the exposed portions of the substrate. Any remaining mask layer is subsequently removed from the high refractive index glass substrate. The removal of the glass forms a desired patterned structure, such as a diffractive grating, in the high refractive index glass substrate.

IPC 8 full level

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CPC (source: CN EP KR US)

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